## **REMARKS**

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated February 19, 2009 has been received and its contents carefully reviewed.

Claims 38 and 39 are hereby amended to correct claim dependency. Applicants assert that this is not a substantive amendment as it merely corrects a clerical error. Accordingly, this amendment should not necessitate a further search. No new matter has been added. Claims 1-30 were previously canceled without prejudice or disclaimer. Accordingly, claims 31-48 are currently pending. Reexamination and reconsideration of the pending claims is respectfully requested.

By way of explanation, Applicants state that the invention provides a method for writing, in a datagram transmitted, route references so that it is possible to identify the whole path in the communication network that has been used by the datagram.

The written route references are presented in the form of a reference vector, i.e., an indexed list of route references, so that each router can write a reference of the route it selected for the datagram without erasing the references written by the preceding routers that have previously transmitted the datagram. Therefore, the vector includes a trace of the whole path used by the datagram, and not only a reference of the last route used. The vector index is incremented each time a new reference is added. In this way, the vector index points to a location in the indexed list where a new reference is to be written, thereby preventing the overwriting of any previously stored route references.

Applicants assert that none of the documents cited by the Office discloses using such a vector in a datagram for indicating route references used all along the transmission path so that the references are all retained in the datagram. Accordingly, Applicants assert that the subject matter of independent claim 31, directed to a process, and independent claim 46, directed to a router, cannot be deduced from any combination of the cited documents. Therefore, Applicants request withdrawal of all pending claim rejections. Applicants' comments concerning each rejection asserted by the Office follows.

The Office rejects claims 43-45 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication No. 2004/0090955 to Berthaud et al. (hereinafter "Berthaud"). Office Action at p. 2,  $\P$  5. Applicants respectfully traverse the rejection.

Independent claim 43 is allowable in that it recites, among other features, "means for producing a datagram to be sent by the terminal, the <u>datagram comprising</u> an <u>ordered field vector</u> and a <u>vector index field</u>; means for <u>writing an initial reference into each field of the vector</u> of the datagram to be sent <u>by the terminal</u>; and means for <u>writing an initial value into the index field</u> of the datagram to be sent <u>by the terminal</u>." (Emphasis added).

Berthaud fails to describe, either expressly or inherently, at least these features of the claimed invention. At most, Berthaud discloses the use of distance vector routing where, "an IP routing table in each router is used to forward datagrams between networks," and that, "outgoing datagram is subject to the IP routing algorithm of the router." Berthaud at ¶ [0016]. The routing algorithm of Berthaud is based on distance where, "Each router is configured at the beginning of the process with a distance vector table comprising zero for itself, one for directly attached networks, and infinity for every other destination." Berthaud at ¶ [0018]-[0021]. Thus, Berthaud discloses that, "Once a router has found out the shortest distance to a destination network, the router will always use this route to reach the destination network." Berthaud at ¶ [0027].

The Office equates the claimed "means for writing an initial reference into each field of the vector of the datagram to be sent by the terminal" with *Berthaud's* disclosure that "Each router is configured at the beginning of the process with a distance vector table comprising zero for itself, one for directly attached networks, and infinity for every other destination." *Office Action* at p. 3. The Office then deduces (as best understood by Applicants) that it is inherent to write "an initial reference into each field of the vector of the datagram to be sent by the terminal." *Office Action* at p. 3. Applicants disagree. The Office's leap from the disclosure of *Berthaud* to the Office's assertion of inherency cannot be followed. If the Office insists on maintaining its assertion of inherency, Applicants require written proof and additional explanation.

The Office also associates the claimed "means for writing an initial value into the index field of the datagram to be sent by the terminal" with purported static values preconfigured on each router interface by stating: "One of the characteristic of the distance vector routing is that the distance is a static value pre-configured on each router interface." Id. Applicants respectfully disagree. In fact, Berthaud is not directed to a terminal that includes means for producing datagrams. As evidenced above Berthaud is merely concerned with a distance vector table and does not even consider benefits that could be obtained by use of the claimed invention. Such as, for example, making use of the references contained in the vector of a first datagram to be returned in a response datagram pertaining to the same communication session. Subsequently, for example, an emitting terminal may copy the references from a response datagram to the next datagram to be transmitted. Thus, unlike Berthaud, where, "Once a router has found out the shortest distance to a destination network, the router will always use this route to reach the destination network," the current specification has the optional advantage of distributing the flows of datagrams between different transmission links of the network according to their availability, and if a route used for an earlier datagram of a flow is no longer available, then the new datagram may be forwarded along a new route. See Specification at ¶¶ [0126]-[0127]. Additionally, when a new datagram belongs to a flow for which datagrams have already been sent, a benefit may be given to the new datagram by its use of a route taken by an earlier datagram of the same flow, thus leading to similar transmission times for all datagrams using similar flows. Specification at ¶ [0125].

Thus, *Berthaud* does not disclose, at least, "means for producing a datagram to be sent by the terminal, the <u>datagram comprising</u> an <u>ordered field vector</u> and a <u>vector index field</u>; means for <u>writing an initial reference into each field of the vector</u> of the datagram to be sent <u>by</u> the terminal; and means for <u>writing an initial value into the index field</u> of the datagram to be sent <u>by the terminal</u>," as recited in independent claim 43. (Emphasis added).

Accordingly, Applicants respectfully submit that independent claim 43 is patentably distinguishable over *Berthaud*. It stands to reason that claims 44 and 45, which depend from claim 43, are also patentably distinguishable for at least the same reasons. Thus, Applicants respectfully request the Office to withdraw the 35 U.S.C. § 102(b) rejection of claims 43-45.

The Office rejects claims 31-42 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,473,421 to Tappan et al. (hereinafter "Tappan") in view of U.S. Patent No. 6,763,007 to La Porta et al. (hereinafter "La Porta"). Office Action at p. 5, ¶ 7. Applicants respectfully traverse the rejection.

Independent claim 31 is allowable in that it recites, at least, "reading a value in the index field of the datagram; <u>reading the reference</u> contained in the field of the vector of the datagram designated by the <u>read index value</u>...writing into the <u>index field</u> of the datagram <u>a value equal to</u> the read value incremented by one unit." (Emphasis added).

Applicants submit that *Tappan* and *La Porta*, either individually or in combination, fail to teach or suggest, at least these above-recited features of the claimed invention.

As admitted by the Office, *Tappan* fails to teach or suggest, "the read index value...writing into the index field of the datagram a value equal to the read value incremented by one unit...." *Office Action* at pp. 7. Thus, *Tappan* fails to teach or suggest, at least, "the <u>read index value</u>...writing into the index field of the datagram a value equal to the read value incremented by one unit...," as recited in independent claims 31. (Emphasis added).

La Porta fails to cure the deficiencies of Tappan. In fact, the Office associates incrementing a sequence number field value and setting a metric field "to one by the base station ...and sequentially incremented by each successive router receiving the message," with, "the read index value writing into the index field of the datagram..." Office Action at p. 7 citing La Porta at col. 22, ll. 63-66 & col. 15 ll. 14-17. Applicants respectfully disagree. In fact, La Porta merely teaches that, "The sequence number field 312 is used to prevent looping of packets between an old base station and a router when a mobile device is handed off." La Porta at col. 14, ll. 46-49. However, the sequence number field is not equivalent to the claimed "vector index field" as the latter is associated with respective routes of a network, while the former is merely used to prevent looping. Additionally, "The metric field 320 identifies the number of hops from the base station or router processing the Information Element to the mobile device." La Porta at col. 14, ll. 56-59. However, unlike La Porta's metric field, the claimed "reference contained in the field of the vector" is associated with an identity of the path used in the communication network that has been previously used by a datagram.

Thus, *La Porta* fails to teach or suggest, "the <u>read index value...writing into the index</u> field of the <u>datagram a value</u> equal to the read value incremented by one unit," as recited in claim 31. (Emphasis added).

Claims 32-42 depend from independent claim 31 and are therefore allowable over *Tappan* and *La Porta* for at least the same reasons as claim 31, as well as because each of these claims recites a unique combination of features not disclosed or taught by the cited art.

Accordingly, Applicants respectfully request the Office to withdraw the rejection of claims 31-42 under 35 USC § 103(a).

The Office rejects claims 46 and 47 under 35 U.S.C. § 103(a) as being unpatentable over *Berthaud* in view of *La Porta*. Office Action at p. 14,  $\P$  8. Applicants respectfully traverse the rejection.

Independent claim 46 is allowable in that it recites, at least, "means for <u>writing a value equal to the read value</u> incremented by one unit into the <u>index field</u> of said datagram." (Emphasis added).

Applicants submit that *Berthaud* and *La Porta*, either individually or in combination, fail to teach or suggest, at least these above-recited features of the claimed invention.

As admitted by the Office, *Berthaud* fails to teach or suggest, "means for writing a value equal to the read value incremented by one unit into the index field of said datagram."

Office Action at pp. 7. Thus, *Berthaud* fails to teach or suggest, at least, "means for writing a value equal to the read value incremented by one unit into the index field of said datagram," as recited in independent claims 46. (Emphasis added).

La Porta fails to cure the deficiencies of Berthaud for at least the same reasons as stated above with respect to the combination of Tappan and La Porta. Thus, La Porta fails to teach or suggest, "means for writing a value equal to the read value incremented by one unit into the index field of said datagram," as recited in claim 46. (Emphasis added).

Claim 47 depends from independent claim 46 and is therefore allowable over *Berthaud* and *La Porta* for at least the same reasons as claim 46, as well as because this claim recites a unique combination of features not disclosed or taught by the cited art. Accordingly, Applicants respectfully request the Office to withdraw the rejection of claims 46 and 47 under 35 USC § 103(a).

The Office rejects claim 48 under 35 U.S.C. § 103(a) as being unpatentable over Berthaud in view of La Porta, and further in view of Tappan. Office Action at p. 16,  $\P$  9. Applicants respectfully traverse the rejection.

As discussed above, *Berthaud* and *La Porta* fail to disclose or suggest all the features of claim 1. *Tappan* fails to cure the deficiency of *Berthaud* and *La Porta*. Claim 48 is at least allowable by virtue of its dependency from claim 46. Additionally, *Tappan* is merely cited for a purported teaching of, "prefixes [that] may be aggregated as a single address prefix...which contains both IP address ranges...." *Office Action* at p. 17. Accordingly, Applicants respectfully request the Office to withdraw the 35 U.S.C. § 103(a) rejection of claim 48.

## **CONCLUSION**

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the

filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

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